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# Nemegosenda Lake Provincial Nature Reserve

## Interim Management Statement

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Ministry of
Natural
Resources

Ontario

March, 1985

REGIONAL DIRECTOR'S APPROVAL STATEMENT

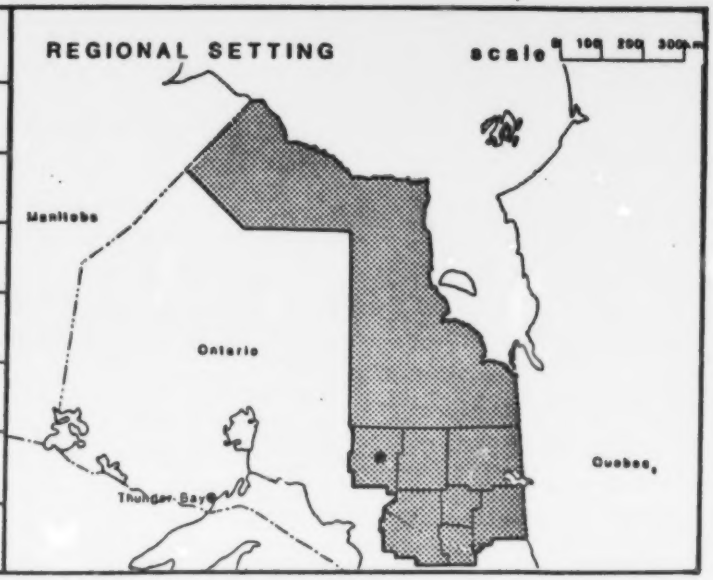
I am pleased to approve this Interim Management Statement for Nemegosenda Lake Provincial Park.

This Statement will provide direction for the management of Nemegosenda Lake Provincial Park until a Park Management Plan is completed. It will also set the general direction for the preparation of the more detailed management policies that the Management Plan will contain.

R.A. Riley
Regional Director
Northern Region

# BACKGROUND

| | |
|---|---|
| **NAME:** Nemegosenda Lake | **REGIONAL SETTING** |
| **PROPOSED CLASS:** Nature Reserve | |
| **M.N.R. DISTRICT** Chapleau | |
| **M.N.R. REGION:** Northern | |
| **AREA (ha.):** 7.3 ha± | |
| **SITE REGION:** | |
| **SITE DISTRICT:** | |
| **DATE in REGULATION:** | |




## LIFE SCIENCE TARGET

| site type/landscape unit | species/communities |
|---|---|
| | |

## EARTH SCIENCE TARGET

| geological theme | feature |
|---|---|
| Precambian | Nemegosenda Lake complex<br>- fenite & syenite multiple intrusions |

## CULTURAL RESOURCE TARGET

| theme | theme segment |
|---|---|
| | |

## RECREATION OPPORTUNITIES TARGET

| day use | car camping | wilderness back country |
|---|---|---|
| | | |

## INVENTORIES

| level / type | earth science | life science | cultural | receational | |
|---|---|---|---|---|---|
| reconnaissance completed | Yes | No | No | No | |
| detailed completed | Yes | No | No | No | |
| required | No | No | No | No | |

## POTENTIAL RESOURCE USE CONFLICT

## MATERIAL APPENDED

D.L.U.G. extract ☒ checksheet ☐ other background information sheet

# MANAGEMENT STATEMENTS

## 1. Issues

There are no relevant management issues for this park.

## 2. Resource Management Guidelines

### 2.1 Mineral Resources Management

| Analysis | Guidelines | Recommendation |
|---|---|---|
| The nature reserve status of the park protects it from any form of degrading land use/activity including such forms of surface exploration/mining as open pit mining. | Geological investigation may be authorized by the district manager provided that such activity enhances knowledge/understanding of the geological features, and that the results of such work are made available to M.N.R.<br><br>Mineral exploration/ extraction will not be permitted. | That the guidelines be implemented with the approval of the plan and following appropriate changes to regulation. |

### 2.2 Wildlife Management

| Analysis | Guidelines | Recommendation |
|---|---|---|
| The park falls within Trapline CP-30. | As hunting and trapping pose no threat to site values, these activities will be permitted. | That the guidelines be implemented with the approval of the plan and following appropriate changes to regulations under The Game and Fish Act. |

### 2.3 Vegetation Management

| Analysis | Guidelines | Recommendation |
|---|---|---|
| The park contains no known significant vegetation sites. | Silviculture which enhances the park's geological features will be permitted. | That the guidelines be implemented with the approval of the plan. |

## 3.0 Client Services Management Guidelines

3.1 Information: Basic information about Nemegosenda Lake Provincial Park will be produced for geologists and students. Specifically, a small leaflet providing information about access, the park's significance, references, and so forth, using photos, access and geological maps, and text should be adequate.

3.2 Education: Prospective visitors should be warned of the resource's vulnerability to damage from collectors; for example, in any publication which is produced for the park.

3.3 Development: At present, the site is undeveloped and access is restricted to the use of watercraft. This situation facilitates protection of the site from human impact, and will be maintained.

## 4.0 Research

The Ontario Provincial Parks Planning and Management Policies describes scientific research policy in nature reserves as follows (NR-IV-10).

> Scientific research by qualified individuals, which contributes to knowledge of natural .... history and to environmental management, will be encouraged in Nature Reserves.
>
> All research programmes will require the approval of the Ministry of Natural Resources and must also meet all requirements under applicable provincial and federal legislation. The Ministry may approve the removal of .... geological samples .... by qualified researchers .... Approved research activities and facilities will be compatible with protection values .... in individual Reserves, and will be subject to development and management policies for Nature Reserves unless special permission is given. Sites altered by research activities will be rehabilitated as closely to their previous condition as possible.

**Precambrian Formations**

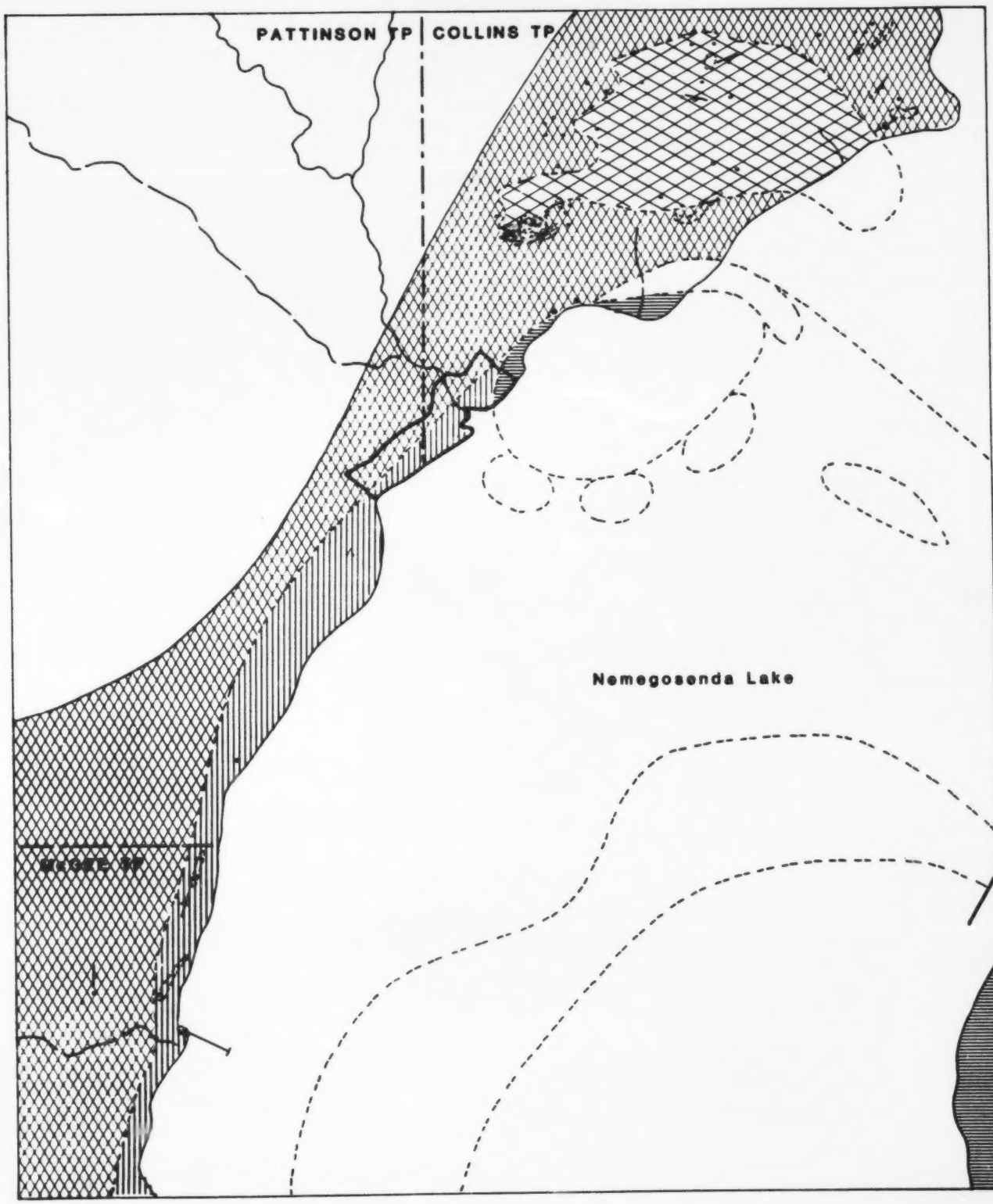
Alkaline Rocks
- Alkaline syenites

Fenites
- Red alkaline fenite
- Ijolitized breccia

Country Rocks
- Intrusives
- Gneiss

Symbols
- Small rock outcrop
- boundary of rock outcrop
- Geological boundary, defined
- Geological boundary, assumed
- Strike and vertical dip
- Strike and dip of foliation
- Strike of vertical foliation
- Drill hole

0 500m North



## APPENDIX 1 - NATURAL RESOURCES BACKGROUND INFORMATION

Bedrock in the Nemegosenda Lake earth science Nature Reserve lies within a Proterozoic aged alkalic complex in the Superior structural province of the Canadian Shield.

Frey (1980), describes the site rocks as follows.

> The site is an intrusive contact between red alkalic fenite and grey alkalic syenite, two phases of multiple instrusions that comprise part of the Nemegosenda Lake complex. The fenite may be of magmatic origin. The grey syenite intrusion is characterized by the presence of magnetite and biotite as accessory minerals and a marked increase in nepheline content, in contrast to that of the red fenite. The fenite consists mostly of pyrozene minerals and fresh and altered feldspars. It is reported to be radioactive and contains about 0.2% niobium oxide.

Frey (1980) appraises the park's earth science features as being of regional significance according to the following rationale.

> The rock-types exposed supplement other varieties in similar Late Precambrian alkalic complexes and Nature Reserve candidates in the Kirkland Lake and North Bay districts. Together these rock-types are representative of the few surficial exposures of alkalic complexes known in the province. The easy air and water access of Nemegosenda Lake and its location at one end of a Provincial Waterway Park add substantially to its value as a Nature Reserve candidate.

## 6. THE PATTINSON TOWNSHIP SITE

**a. Area Description**

This candidate nature reserve area is located on the western shore of Nemegosenda Lake. The 3.6 hectare site contains a regionally significant exposure of a carbonatite-alkalic complex.

**b. Land Use Intent**

The Pattinson Township nature reserve candidate is recommended for park status.

**c. Land Use Activity For Area No. 6 — THE PATTINSON TOWNSHIP SITE**

| Activity | Acceptable | | Recommended Guidelines |
|---|---|---|---|
| | Yes | No | |
| Aggregate Extraction | | x | |
| Agriculture | | x | |
| Bait Fishing | | x | |
| Commercial Fishing | | x | |
| Cottaging | | x | |
| Crown Land Recreation | | x | Not applicable |
| Forestry | | x | |
| Hunting | x | | It is recommended that hunting be permitted to continue. |
| Mining | | x | |
| Provincial Parks | x | | Recommended for park status. |
| Roads | | x | |
| Rural Residential | | x | |
| Sport Fishing | | x | |
| Tourism | | x | |
| Trapping | x | | It is recommended that existing trapping activity be permitted to continue. |
| Urban Development | | x | |
| Wild Rice Harvesting | | x | |
| Wildlife Viewing | x | | |

# REFERENCES


Frey, E. "Candidate Earth Science Nature Reserves", Northern Region (unpublished), 1980.

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